Features

The Connected Services Gateway (CSG) is an all-in-one interface card that enables the following SafeLINC Cloud Services:

- Enables authorized users to access their fire alarm control system remotely through the SafeLINC website or mobile app
- View current and historical event data
- Receive event notifications by email and push notification

Compatibility

- For use with Fireclass FC32, FC64, FC240, FC501, FC506, FC503, FC600 and FC700 fire alarm control panels
- Backward compatibility
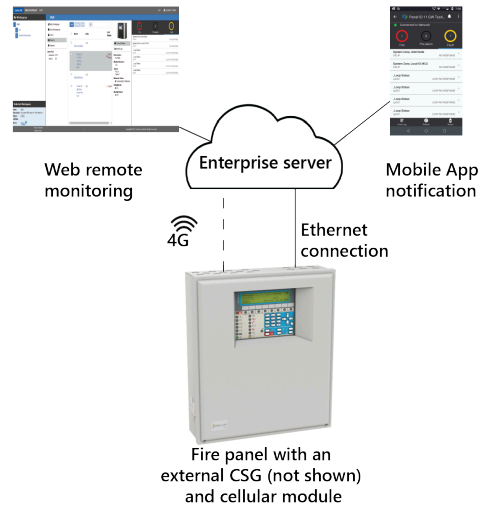- Connects to a fire panel by Ethernet cable or by serial cable at a COM1 serial port

Installation

Externally mounted option available to provide flexibility when space or cellular signal strength is inadequate.

Connectivity flexibility

- CSG supports Ethernet and cellular connectivity for SafeLINC connection. By default, Ethernet is the primary path for the SafeLINC connection. If the primary path goes down, the CSG switches over to the cellular path for SafeLINC connectivity.
- Antenna extension kits are available for installations with inadequate cellular signal

Figure 1: Overview of SafeLINC Cloud

Web remote monitoring

Enterprise server

Mobile App notification

4G

Ethernet connection

Fire panel with an external CSG (not shown) and cellular module

Description

SafeLINC Cloud Services is a service facilitated by the CSG. It creates a digital twin of the fire alarm system, and provides remote access to fire alarm system activity to authorized users. Other features include:

- Encrypted and secure connection to the fire panel through iOS®, Android®, and web applications
- Developed in accordance with internationally recognized cyber security standards
- Provides real-time fire panel events notification, including Fire, Pre-alarm, and Fault
- Single portal facilitates users to view all their connected fire panels
- Downloadable fire panel status reports

SafeLINC Cloud Services

Enterprise server reporting features IP and cellular capabilities.

Connected Services Gateway

The CSG connects a fire panel to the SafeLINC Cloud Platform. The CSG maintains a secure connection to the Cloud Platform using any of the available communication methods and transfers the panel's configuration, status, and events.

The CSG natively implements a generic fire panel protocol that you can use with any panel, and that you can adapt to support other legacy fire panel protocols.

SafeLINC Cloud Platform

The Cloud Platform connects fire panels to the cloud and sends its status and events. The Cloud Platform is responsible for managing the link between the equipment and a user's account. It also generates notifications in the form of emails or mobile application push notification when a panel event is reported.

SafeLINC Web Architect user interface (UI)

You can access the web UI with most modern web browsers. The web UI shows connected devices and their current state. You can also add new connected equipment to your workspace, invite other users, and configure notifications for equipment events.
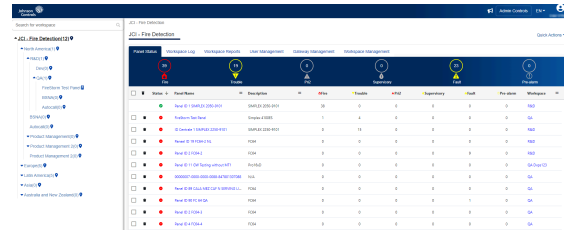
Figure 2: SafeLINC Web Architect UI

Figure 2 shows a typical SafeLINC Web Architect UI. It can include the following information:

Workspaces

The SafeLINC Cloud Platform is composed of a collection of hierarchical containers called workspaces that enables authorized users to manage sub-workspaces, connected devices, and authorized users. The workspace architecture provides flexibility for all users, from large commercial users managing multiple connected fire panels to single panel users at a local level.

Selected Workspace

A detailed view of a specific workspace with the following information:

- Name and description
- Associated region and address

Sub-Workspace

View a non-aggregated list of CSGs and fire panels associated with a workspace.

A detailed view of a specific Gateway with the following information:

- Name or Unique Identifier (UID)
- Alias and description
- Connectivity status to Cloud
- Operational status
- Cellular IMEI and ICCID, if available
- Current firmware version
- Associated fire panel

A detailed view of a specific fire panel with the following information:

- Name, alias, and description
- Revision
- Connectivity status to Gateway
- Alarm Silenced Status
- AC Power status

- Current or last known active status by category (Fire, Pre-alarm, and Fault)
  - Active events count with acknowledge status
  - List of active events with acknowledge status
  - Details of the event
- Fire panel event log with filtering, search, and export capabilities

Settings

Notification Settings

Notification settings include the following actions :

- Enable or disable all notifications by type
- Enable or disable specific Push notifications or Email
- Configure notifications from individual fire panels
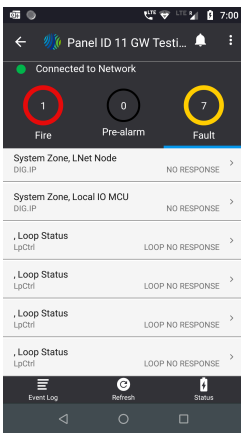
Display Event Settings

Enable additional event to be visible in custom ring

ⓘ **Note:** This is an upcoming feature.

SafeLINC mobile app

The SafeLINC mobile app allows users to supervise their managed fire panels and receive push notifications about events on-the-go.

Figure 3: SafeLINC mobile app

Mobile app features

- Log on with Microsoft account credentials
- View assigned root workspace and all associated sub-workspace hierarchy
- A detailed view of a specific workspace
- View non-aggregated list of fire panels associated with a workspace

A detailed view of a specific fire panel with the following information:

- Name, alias, and description
- Connectivity status
- Alarm Silenced status
- AC power status
- Current or last known active status by type (Fire, Pre-alarm, and Fault)
  - Active events count with acknowledge status
  - List of active events with acknowledge status
  - Details of the event
- Event log with filtering and search capabilities
- Push notifications from selected fire panels and event types. Configure notifications in the web UI.
- View list of push notifications received

Email

Email notifications from selected fire panels and event types. Configure notifications in the web UI.

Ordering information

Table 1: Connected Services Gateway

SKU	Panel type	Description	Ordering information
557.202.132	FC32, FC64, FC240, FC501, FC506, FC503, FC600, and FC700	Fireclass Connected Service Gateway with Enclosure	Includes power cable and serial cable

Table 2: Cellular modules and antennae

SKU	Panel type	Description	Ordering information
557.202.145	-	4G module and antenna kit	Optional, used in conjunction with the Fireclass CSG
557.202.142	-	15 ft (4.57 m) antenna extension kit	Optional
557.202.143	-	25 ft (7.62 m) antenna extension kit	Optional
557.202.144	-	50 ft (15.24 m) antenna extension kit	Optional

Specifications

Table 3: CSG technical specifications

Specification	Rating
Electrical	
Voltage DC	24 V
Current DC	125 mA
Environmental	
Temperature	-5°C to 40°C, ± 2°C
Relative humidity	93%, ± 2% or 3%
Gateway Size (L x W)	7 in. x 4 in. (177.8 mm x 101.6 mm)
Gateway Weight	0.33 lb (0.15 kg)
Enclosure Size (L x D x H)	9.4 in. x 2.3 in. x 6.1 in. (239 mm x 53 mm x 156 mm)
Enclosure Weight	3.1 lb (1.40 kg)

Table 4: Cellular module technical specifications

Specification	Rating
Electrical	
Voltage DC	3.9 V
Current DC	20 mA
Environmental	
Temperature	-5°C to 40°C, ± 2°C
Relative humidity	93%, ± 2% or 3%
Size (L x W)	2.4 in. x 3.2 in. (62 mm x 82 mm)
Weight (with Gateway PCBA)	0.66 lb (0.3 kg)

Table 5: Antenna specifications

—	557.202.142: CSG Antenna Extension Kit 15 ft (4.5 m)	557.202.143: CSG Antenna Extension Kit 25 ft (7.5 m)	557.202.144: CSG Antenna Extension Kit 50 ft (15 m)
Specification	**Rating**		
Antenna type	1/4 wave helical	1/4 wave helical	1/4 wave helical
Gain	3.0 dBi	3.0 dBi	3.0 dBi
Polarization	Linear vertical	Linear vertical	Linear vertical
Frequency range	698-2700 MHz	698-2700 MHz	698-2700 MHz
Azimuth beam width	Omnidirectional	Omnidirectional	Omnidirectional
Total weight including cable	1.68 lb (0.76 kg)	2.16 lb (0.98 kg)	3.44 lb (1.56 kg)
Antenna length/diameter	13.1 in. (333 mm)	13.1 in. (333 mm)	13.1 in. (333 mm)
Coaxial cable length	15.1 ft (4.6 m)	24.6 ft (7.5 m)	49.2 ft (15 m)
Connector type	RP-SMA Male	RP-SMA Male	RP-SMA Male